PNW Research Station Scientist Recruitment Initiative RWU Proposal (June 2000)

Name of Proposal Contact: Dale Weyermann

RWU Title: Forest Inventory and Analysis

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Name and contact points of proposed position supervisor: Dale Weyermann

Position title/discipline of proposed position: Research Forester or Research Geographer

Brief description of proposed RWU/graduate research supported through this position:

The Forest Service supervisor and the student will develop methods for estimating and evaluating forest conditions continuously across broad regions, using remotely-sensed products (primarily satellite imagery and aerial photography) and forest measurements collected on the ground.

The Forest Inventory and Analysis Research Program (FIA) at the Pacific Northwest Research Station (PNW) maintains a grid of over 35,000 permanent field plots evenly distributed across all forested lands in the Pacific Coast states, that are visited and remeasured on a ten-year cycle. National standards for consistency in estimating and reporting forest conditions, a new emphasis on monitoring, and increasing demands to produce "wall-to-wall" map representations of hundreds of forest attributes require new, innovative approaches to integrating data from remote sensing and permanent forest inventory plots.

Desirable academic qualifications of the student recruit: Bachelor's Degree in Geography, Geo-sciences, Forest Science, or related discipline. A strong background in statistics and forestry is desired. The program will lead to a Master's Degree or Ph.D.

Colleges/universities (to extend beyond those already identified in the Service-wide multicultural workforce initiatives such as Historically Black Colleges and Universities, the American Indian Higher education Consortium, and the Persons with Disabilities Initiative) to be contacted for potential recruits/applicants: Oregon State University, University of Washington, University of California Santa Barbara, San Diego State University, and University of North Carolina.

Potential colleges/universities to provide graduate education: Since there are no suitable colleges or universities in the Portland commuting area to support the required coursework, PNW FIA will consider suitable colleges or universities not in the Portland area. Preference will be given to university programs that emphasize Pacific Coast Ecosystems. Oregon State University, University of Washington, University of California Santa Barbara, San Diego State University, and University of North Carolina all have strong programs that would meet our

requirements. Oregon State University and University of Washington are both co-located with PNW Laboratories, and have traditionally been chosen for cooperative programs.

Oregon State University has graduate programs in Geo-sciences and Forest Sciences. OSU and the PNW have already undertaken several existing collaborations concerning the ecology and characterization of forest lands. The Coastal Landscape Analysis and Modeling Study (CLAMS) are located at the PNW Corvallis Lab, as is the Laboratory for Applications of Remote Sensing in Ecology (LARSE). Both CLAMS and LARSE offer expertise in combining remotely sensed data with ground collected data. OSU is the Land Grant, Sea Grant and Space Grant University for the State of Oregon, and is a member of the Affiliated Research Center Program of remote sensing research universities.

University of Washington has graduate programs in Forest Resources and Geography. UW is home to the Remote Sensing Applications Laboratory (RSAL) and the Intelligent Systems Laboratory (ISL), both of which conduct research in remote sensing techniques.

Brief description of the community environment (including housing, transportation and recreational opportunities, ethnic background): Corvallis, OR, is a college town of approximately 50,000. Corvallis is situated in the Willamette Valley of western Oregon, 90 miles south of Portland. Corvallis is well situated for recreational opportunities from skiing to exploring ocean beaches. Corvallis has excellent healthcare and educational systems. Ethnic diversity is approximately 90% white, 5% Asian, 3% Hispanic and 2% black.

Seattle, WA, is a culturally diverse metropolitan area of nearly 2 million people. It is situated on an inlet of the Pacific Ocean, and is near several National Parks, ski areas, lakes and other recreational opportunities. Housing is typical of a large metropolitan area. Seattle is home to high-tech and aerospace industries. Ethnic diversity is approximately 82% white, 11% Asian, 4% Hispanic and 6% black.

Proposed temporary housing options for the student while working away from the campus (for example while working at the lab during summer months): The PNW FIA unit is located in central Portland, OR, a diverse urban center of one million people. Housing opportunities in Portland are typical of a large metropolitan area.

Brief explanation of how this proposal supports the scientist recruitment initiative: This proposal will train a scientist for a research position in the PNW Station. This scientist will be actively involved with colleagues at other FIA units in the United States in developing estimation procedures to support the national FIA inventory system.

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Station Priority of proposal: Pr	riority 1	Priority 2	
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/s/ Dale L. Weyermann	GIS Manager	6/15/2000	